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A CAHNERS PUBLICATION SEPTEMBER 1992

graphic arts monthly®

THE MAGAZINE OF THE PRINTING INDUSTRY

New-Age Color 'Match' Yields to Consistency In Proofing

Graph Expo '92

Waterless Printing

Overview of Print Target Markets

VOLUME 64, NUMBER 9

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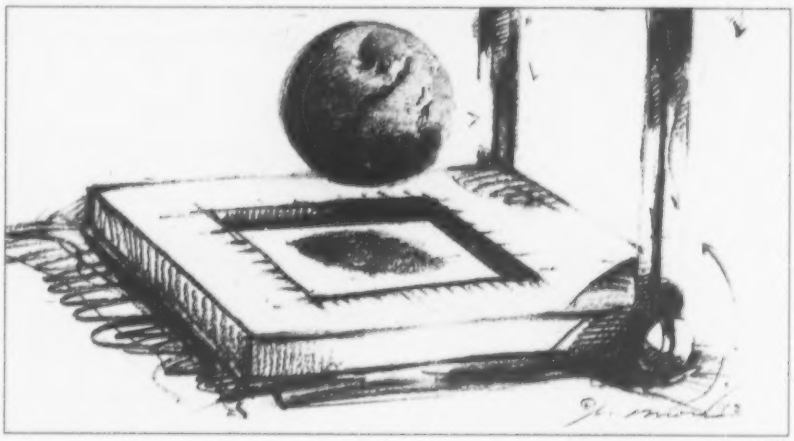
FEATURES



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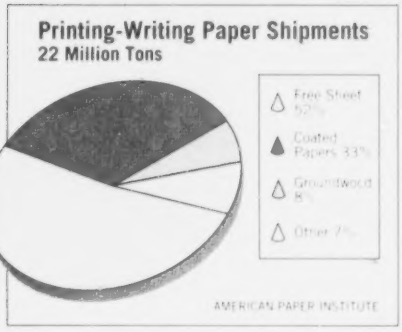
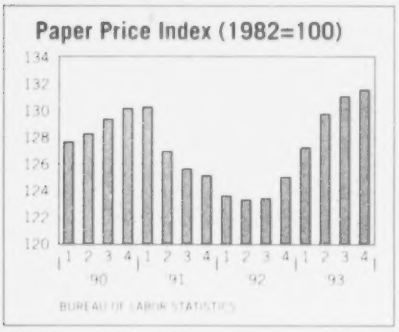
Printing-Writing Paper Demand Up



In the first five months of 1992, shipments of printing and writing papers increased 2.5% above last year. But, in the most recent two months, shipments growth has been waning. Still, there appear to be some clear signs of a pick up in paper demand from the advertising-related end-markets. In particular, newspaper classified lineage and magazine advertising pages are on an upward trend. Furthermore, commercial printing usage has increased as paper shipments to commercial printers has risen 5.3% so far this year.

The most substantial shipment gains have come from uncoated free sheet papers. Free sheet accounts for 52% of all printing and writing paper shipments; shipments of this paper type have risen 5.3% since the beginning of the year. Meanwhile, shipments of all coated papers, representing 33% of printing and writing papers, rose 2.4%, and uncoated groundwood paper shipments dropped 12.4%. The overall outlook calls for a moderate increase this year followed by a stronger pick up in 1993 as the economic recovery gains momentum.

2nd-Quarter Paper Prices Down



Transaction prices for every major paper category will drop again in 1992, for the third year in a row. While demand is picking up slowly, it is significant enough to put an upward pressure on prices. Second-quarter price data is in and the news remains good for printers and other paper buyers. The only paper categories to increase in price in the second quarter were 35-lb offset-uncoated groundwood and bond-uncoated white #4, and the gains were very slight.

Prices for all coated paper grades are now at least $100 per ton less than a year ago. These trends are reflected in the producer price index for all paper types. The index rose temporarily in May but dropped back down in June to 123.3 (1982=100). The average index level for the first half of this year is the lowest since early 1988. Paper prices are expected to slowly increase and reach 125 by the end of the year. The forecast calls for the index to rise to 131.5 in 1993, the same level as the peak in mid-1989.

The paper transaction price data highlights the drop in paper prices over the past year. Actually, prices of most paper grades will post their third consecutive year of declines in 1992. Shipments, while improving slightly so far this year, have yet to make any substantial gains. Demand for paper has increased, but not enough to match the available supply. Thus, paper prices are sure to remain low until demand really picks up.

PAPER INDUSTRY INDICATORS

				Annual % Change		
Shipments (1)	**Q2/92**	**Q1/92**	**Q2/91**	**1990**	**1991**	**1992**
Coated paper	1802	1822	1726	3.9	-2.2	0.9
Uncoated groundwood	384	378	420	0.4	-0.8	-5.4
Uncoated free sheet	2852	2949	2769	4.1	0.3	4.3
Transaction Prices (2)						
Newsprint, 30lb. East	$411	$409	$530	-2.3	-4.6	-15.2
Directory, uncoated groundwood, 22.5lb., white	675	750	750	-4.0	-2.1	-0.8
Specialty, uncoated groundwood, 54lb.	685	750	800	-2.7	-1.6	-4.3
Offset, uncoated groundwood	540	600	605	-3.1	-3.6	-3.1
Offset, uncoated, white, 50lb.	600	643	660	-4.7	-1.1	-5.2
Coated, No.1, 60lb.	1400	1518	1580	-0.1	-2.0	-3.4
Coated, No. 3	930	1000	1077	0.2	-1.1	-5.0
Coated, No.5, 54lb. matte	795	870	905	-3.7	-4.2	-3.8
Bond, uncoated white, No.1 20lb.	1020	1020	1083	-0.7	-0.7	-0.2
Bond, uncoated white, No.4 20lb.	687	640	707	-10.1	-16.6	-9.0

(1) Thousands of short tons, American Paper Institute (2) Dollars per ton, Pulp & Paper magazine's Transaction Pricing Service. Actuals are by Graphic Arts Index.

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Markets Follow Economic Path

Throughout the year we have been focusing in this series on industries that buy a lot of printing from commercial printers, including small ones. That's why we have given very little attention to areas like long-run magazine printing, book manufacturing, or financial printing: the average-size commercial printer doesn't do that kind of work.

We have taken some generally available statistics for each of these industries and tried to determine from them the answers to three questions:

1. How big is it?
2. How's it doing?
3. How's it likely to do over the next year or so?

Those are simple questions; the answers are a bit more difficult to determine. Even #1—size—is problematic. We can figure out roughly how many sites exist in a given industry, and about how many people work in them, which is part of the answer. But part of the question of size has to do with how much money they make, and there the researcher runs into a maze of (often deliberately) confusing accounting systems. It's simpler to look at how much printing they buy and let it go at that, which is what we have done.

> All of these markets are tied to the fortunes of the overall economy.

Questions #2 and #3 are much more difficult. Speaking very, very generally, we can say that, of the industries covered in this survey, publishing, manufacturing, food and lodging, business services, nonprofits, and retail are holding their own. Legal services, as usual, are doing fine. Education and health care are complicated political issues, and their prospects depend to a great extent on political decisions to be taken (or not taken) in the fairly near future. Banking and insurance are deeply entangled with each other, and their situation is anybody's guess.

Which brings us to this month's subject, an overview of the U.S. economy. We present the information in this article merely as a handful of partial snapshots. Some of the available figures do seem to indicate that the economy bottomed out in 1991 and is recovering. Others, such as unemployment and the investment rate, are more ambivalent. All the markets that comprise this series are, to one extent or another, tied to the fortunes of the overall economy.

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Anne Gusman

By Peter Johnston
Special Projects Manager

Print Target Markets at a Glance

Though they were selected purely on the basis of their consumption of commercial printing, the 11 industries included in the Print Target Markets constitute a broadly representative cross-section of the overall economy. They total about half of it, and are drawn from nearly every major economic sector.

Total Establishments: 3,411,519 (56.7% of Total U.S. Business Economy)
Employees: 48,547,645 (55.2% of Total U.S. Business Economy)
Total Annual Payroll: $848,741,714,000 (45.6% of Total U.S. Business Economy)

Source: U.S. Department of Commerce, County Business Patterns

Overall U.S. Economy: Selected Indicators

As we go to press, the most complete figures for 1992 are those for the first quarter. For purposes of comparison we present them with first-quarter figures for 1987-1991. The nadir seems to have been reached in 1991, though unemployment and private investment levels are still unhealthy.

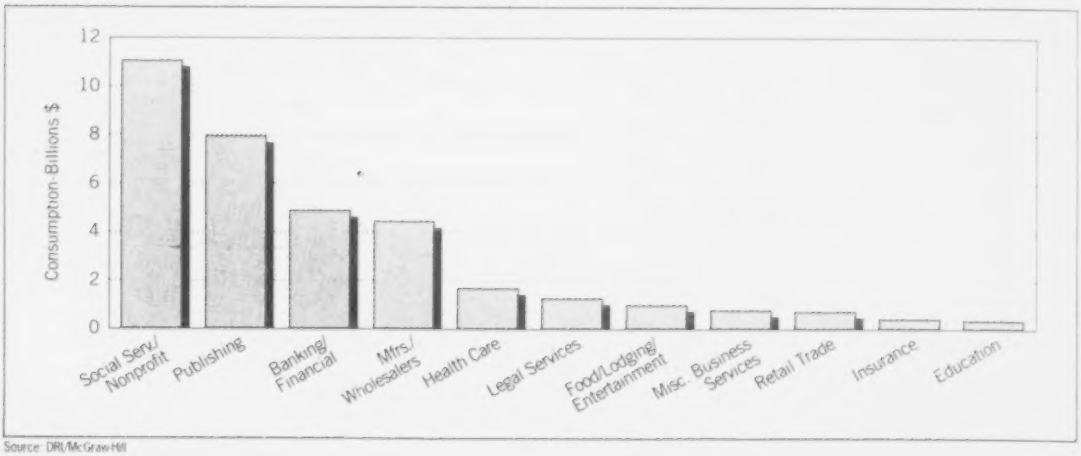
	1987	1988	1989	1990	1991	1992
Gross Domestic Product* (1987 bil. dol.)						
1st Qtr	4,460.0	4,655.3	4,809.8	4,880.8	4,824.0	4,891.9
Year-to-year change		4.4%	3.3%	1.5%	-1.2%	1.4%
Gross Private Domestic Investment*						
1st Qtr	729.3	756.9	803.2	754.9	657.0	666.1
Year-to-year change		3.8%	6.1%	-6.0%	-13.0%	1.4%
Consumer Price Index** (1982-84=100)						
1st Qtr (Figures not seasonally adjusted)	111.6	116.1	121.7	128.0	134.8	138.7
Year-to-year change		4.0%	4.8%	5.2%	5.3%	2.9%
Producer Price Index** (1982=100)						
1st Qtr (Figures seasonally adjusted)	104.3	106.4	111.7	117.5	121.7	122.0
Year-to-year change		2.0%	4.9%	5.2%	3.6%	0.2
Civilian Unemployment Rate**						
1st Qtr	6.6%	5.7%	5.2%	5.3%	6.5%	7.2%

* Bureau of Economic Analysis ** Bureau of Labor Statistics

Charts and graphs by Annabelle Carter

Ranking of the Print Target Markets

Industries to be covered in the Print Target Markets series in 1992 were selected from a DRI/McGraw-Hill listing of the largest purchasers of goods and services from commercial printers. This list was further refined by the editors, primarily by the elimination of industries that are not logical targets for small to medium-size commercial printers. The resulting list represents more than a third of all business-to-business printing sales.



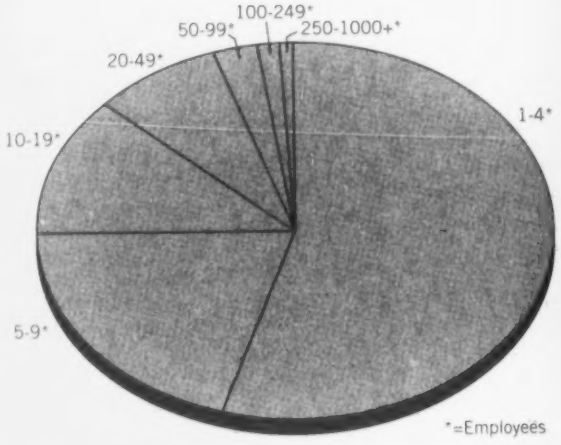
Source: DRI/McGraw-Hill

U.S. Businesses by Employee Size

We are accustomed to thinking of the printing industry as an anomaly: a little island of small, family-owned businesses in a sea of vast corporations. A look at these numbers, however, shows that the industry is not all that different from the overall pattern of U.S. businesses, 75% of which have fewer than 10 employees.

Size	Establishments	Percent
1-4 Employees	3,202,670	54.9%
5-9 Employees	1,206,902	20.1%
10-19 Employees	736,809	12.2%
20-49 Employees	477,406	7.9%
50-99 Employees	167,451	2.8%
100-249 Employees	90,497	1.5%
250-499 Employees	22,903	0.4%
500-999 Employees	8,944	0.1%
1000+ Employees	5,018	0.1%

Source: U.S. Department of Commerce, County Business Pattern



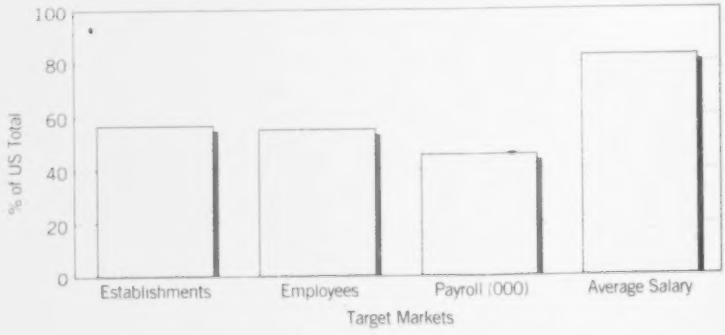
Print Target Markets and the U.S. Economy: Structural Comparisons

The Commerce Department divides the economy into nine major groups: agriculture (including forestry and fishing), mining (which includes oil & gas), construction, manufacturing, transportation & utilities, wholesale trade, retail trade, finance, insurance & real estate, and services. Four of these major groups, agriculture, mining, construction and transportation, are not major consumers of commercial printing and are not represented in the Print Target Markets. However, their relative health has a tremendous indirect effect on the printing industry.

Print Target Market	Establishments	Employees	Payroll (000)	Average Salary
Health Care	417,183	7,221,955	$159,061,465	$22,024.71
Insurance	145,033	2,012,419	$35,602,609	$17,691.45
Retail	1,094,428	12,704,071	$168,029,622	$13,226.44
Wholesale	462,173	5,981,378	$160,225,619	$26,787.41
Education	33,225	1,630,888	$25,019,000	$15,340.72
Bus. Svcs	250,527	4,385,365	$77,999,320	$17,786.28
Nonprofits	219,646	1,893,457	$21,681,049	$11,450.51
Publishing	12,188	357,033	$10,573,089	$29,613.76
Financial	143,761	3,121,268	$88,057,400	$28,212.06
Legal Svcs	135,709	848,507	$30,270,241	$35,674.71
Food, Lodging	497,646	8,391,304	$72,222,300	$8,606.80
TOTAL	3,411,519	48,547,645	$848,741,714	$17,482.65
US TOTALS	6,018,600	87,881,632	$1,859,529,932	$21,159.48

Target Market as % U.S. Total

The figures for establishments and total employment are directly proportional to national averages. When it comes to payroll, it appears that the elimination of relatively high-salary specialty fields such as construction, mining and transportation skew the figures for Print Target Markets sharply downward. A look at average annual salaries shows that about half these industries are below the national average. The very low figure for food & lodging doubtless represents a high contingent of part-time workers.



Source: Department of Commerce

U.S. Economy: Selected Regional Comparisons

Population Increase

Region	Population Increase, 1980-1990
United States	248,710	9.8%
New England	13,207	7.0%
Middle Atlantic	37,602	2.2%
East North Central	42,009	0.8%
West North Central	17,660	2.8%
South Atlantic	43,567	17.9%
East South Central	15,176	3.5%
West South Central	26,703	12.4%
Mountain	13,659	20.1%
Pacific	39,127	23.0%

Source: Statistical Abstract, 1991

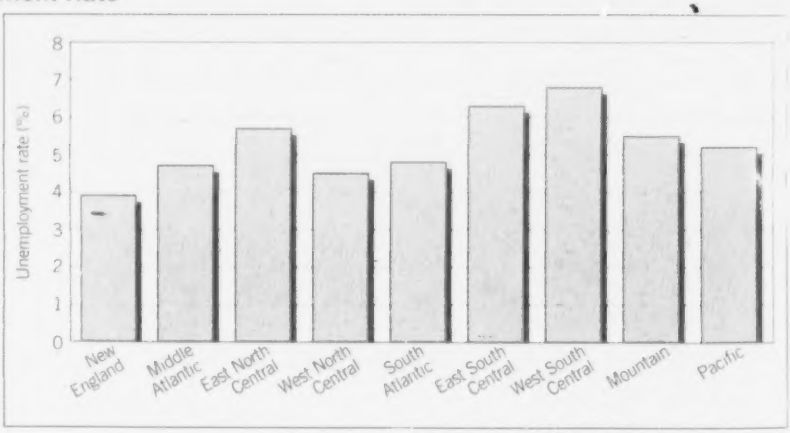
Business Failures/Retail Sales Per Household

	Business Failures, Increase, 1989-90	Retail Sales Per Household, Increase, 1987-89
United States	20.0%	
New England	138.5%	9.2%
Middle Atlantic	61.3%	10.0%
East North Central	-5.8%	8.9%
West North Central	20.8%	10.0%
South Atlantic	29.0%	3.9%
East South Central	27.5%	6.9%
West South Central	15.7%	12.0%
Mountain	13.5%	3.9%
Pacific	7.4%	9.6%

Source: 1991 Statistical Abstract of the United States

Civilian Labor Force: Unemployment Rate

Unemployment is now at its highest level in a good many years in the U.S. Furthermore, the unemployment situation in the United States is considerably worse than is indicated in these figures, which do not count the under-employed, the marginally self-employed, those who have given up and no longer look for work through state employment agencies, and those who have not yet filed for unemployment compensation. The real unemployment rate is a political issue and is not clearly known.



Comments by Printers

West South Central: I think it will be one-to-two years before business will really pick up.

Mountain: Being stable is as good as it gets; there is so much competition in the Denver area.

East South Central: The previous years' profits were made from designing, typesetting, and layout. This has declined.

Middle Atlantic: Too many printers make their prices too low, and they end up out of business.

West North Central: Eastern Iowa is healthy.

Pacific: Area's slow. Only businesses with established good customers will survive.

East North Central: Busy one month, not the next. It's hard to track anything any more.

New England: I am very discouraged. This has been a family business since 1940; I'd sell if I could.

South Atlantic: Business is growing because the South is growing.

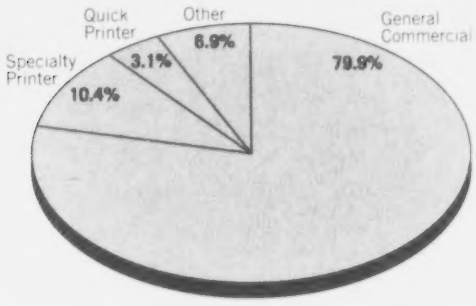
Key to Regions

The nine geographic regions, as referred to throughout this survey:

New England (NE): Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. **Mid-Atlantic (MA):** New Jersey, New York, Pennsylvania. South Atlantic (SA): Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington, D.C., West Virginia. **East South Central (ESC):** Alabama, Mississippi, Kentucky, Tennessee. **East North Central (ENC):** Illinois, Indiana, Michigan, Ohio, Wisconsin. **West North Central (WNC):** Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. **West South Central (WSC):** Arkansas, Louisiana, Oklahoma, Texas. **Mountain (M):** Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming. **Pacific (P):** Alaska, California, Hawaii, Oregon, Washington.

Commercial Printers and the Print Target Markets

Type of Firm



Profile of Respondents

Commercial printers responding to a series of timed mailings during a six-month period. A total of 3,750 names were selected on an Nth name basis from GAM's controlled circulation of commercial printers with 19 employees or less. To eliminate duplication, one name was chosen per site among business and production managers.

Job Title		# of Employees	
Owner/President/CEO	68.2%	1-4	42.5%
Vice-president/General Mgr./ Director	11.6%	5-9	33.6%
Production Mgr./Supervisor	7.9%	10-19	19.2%
Production/Operations	3.1%	20 or more	4.4%
Other	3.1%		

Commercial Printing Revenues Generated from Target Markets

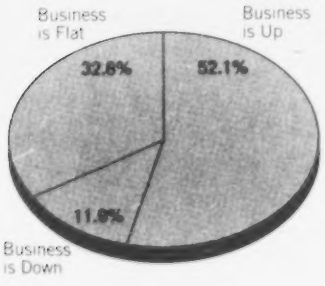
Market	Percentage of Print Revenues
Manufacturers–Wholesalers	22.5%
Retail Trade	14.8%
Misc. Business Services	10.5%
Health Care Providers	9.4%
Social Services–Nonprofits	8.6%
Food, Lodging, Entertainment	7.0%
Educational Institutions	6.8%
Banking/Financial Services	6.1%
Publishing	5.1%
Real Estate	3.6%
Insurance Carriers or Agents	3.0%
Legal Services	2.8%

What Change Do You Expect in your Volume of Business from these industries?

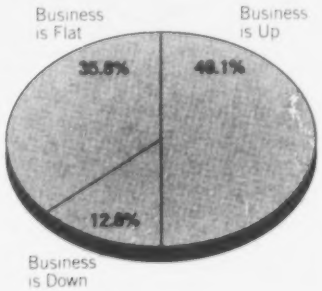
Market	Increase	Business Will Decrease	Remain Steady
Manufacturers–Wholesalers	52.1%	11.9%	32.6%
Retail Trade	49.1%	12.8%	35.8%
Misc. Business Services	45.8%	8.9%	38.8%
Health Care Providers	51.6%	5.7%	40.1%
Social Services–Nonprofits	32.6%	14.0%	49.2%
Food, Lodging, Entertainment	44.6%	9.8%	40.8%
Educational Institutions	34.0%	13.8%	47.9%
Banking/Financial Services	43.9%	14.0%	37.6%
Publishing	43.4%	10.4%	37.7%
Real Estate	30.6%	20.4%	44.6%
Insurance Carriers or Agents	21.6%	15.1%	58.3%
Legal Services	30.2%	7.0%	58.1%

Expected Changes in Leading Industries

Manufacturers–Wholesalers



Retail Trade



Misc. Business Services